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# PEOPLE'S REPUBLIC OF CHINA SCIENTIFIC ABSTRACTS

No. 160

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CHINESE MEDICAL JOURNAL

AUTHOR: None

ORG: Peking Municipal Stomach Cancer Cooperative Group; Yen-t'ai District Stomach Cancer Cooperative Group, Shantung Province; Peking Municipal Institute of Tumor Prevention and Treatment

TITLE: "Application of Graded Selection Technique in General Survey for Stomach Cancer"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 409-411

ABSTRACT: During the previous year the workers of 8 factories in Peking and all members above 25 years of age of the Nan-huang Commune, Ju-shan-hsien, Yen-t'ai District, Shantung Province were examined for stomach cancer as the start of a general survey program for the purpose of early discovery, diagnosis, and treatment of this disease. The technique of 3 or 4-grade selection was used. Clinical physical examination was performed for the entire 21,863 persons. Then, tetracyclin test,  $\alpha$ 2Gp test, or Paramecium skin test were performed for all those suspected of the disease as a result of the first physical examination. Cytological examination was performed for all suspected cases. Finally, all those suspected of the disease were examined with gastroscopy and biopsy. Results of the various tests are evaluated in the paper.

AUTHOR: None

ORG: None

TITLE: "Isolation of Bergenin from *Bergenia Purpurascens* Engl. and Its Pharmacological Experiment"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 p 411

ABSTRACT: Ta-li-chou Pharmaceutical Plant and Ta-li-chou School of Public Health of Yunnan Province have succeeded in isolating Bergenin from the locally produced Yen-pai-ts'ai (*Bergenia purpurascens* Engl.) The production rate is above 3%. Pharmacological experiment indicates a definite antiepileptic activity. When 300mg/kg of Bergenin is applied to a mouse, its activity is about the equivalent of 60 mg of cocaine hydrochloride. In clinical application, unlike cocaine, its cough suppressing activity does not increase with its dosage, while 125 mg is the equivalent of 25 mg of cocaine. In mice, when the dosage was raised up to 96 times the treatment dosage, no acute toxic reaction was observed. It is, therefore, considered to be a relatively safe drug.

AUTHOR: None

ORG: Cyto-biology Group, Institute of Tumor Prevention and Treatment, Chinese Academy of Medical Sciences

TITLE: "Establishment of A Strain of Human Esophageal Cancer Epithelial Cells"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 412-415

ABSTRACT: Extracorporeal and prolonged culture of the cells is a technique for studying the biological characteristic of cancer cells, demalignation action of drugs, cell immunity, viral pathogenesis, etc. The authors went to Lin-hsien of Honan Province, a region of high incidence of esophageal cancer and established a local strain of esophageal cancer epithelial cells. In the past 2 years, more than 80 generations of this strain have been continuously cultured and the morphology of the cell is basically the same as the original. Through heterogenetic graft and electron-microscopic observation, it has been proved that the characteristics of squamous epithelioma are preserved in this strain of cells. This result serves as a powerful counter-attack against the greatest unrepentant capitalist roader within the party, TENG Hsiao-p'ing. The process of establishing this strain of cancer cells is described.

AUTHOR: HU Ching-chen [5170 2529 3791]  
YU Chih-cheng [4416 1807 2973]

ORG: HU of Department of Radiology; YU of Department of Chest Surgery, First Hospital, Harbin University of Medicine

TITLE: "Report of One Case of Congenital Coronary Arteriovenous Fissura"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 p 415

ABSTRACT: This paper reports the case history of a male, 26 years old at the time of surgery. The patient began to suffer from palpitation and shortness of breath in 1958, with regular dizziness and headache. The condition became more and more severe. Following diagnosis of coronary arterial defect, surgery was performed in September 1964 and arteriovenous fissura was discovered and repaired. Follow-ups of the past 11 years revealed the patient to be in good health. He rides a bicycle for 100 km a day and has no obvious symptom. Both EKG and x-ray are normal.

AUTHOR: None

ORG: Department of Radiology, and Department of Pathology, Peking Friendship Hospital

TITLE: "Pathological Changes and X-ray Signs of Primary Peripheral Type Lung Cancer"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 416-418

ABSTRACT: On the basis of analyzing the x-ray photos of 55 cases of peripheral type lung cancer and the data of a comparative study of pathology and x-ray of 25 cases of the group, this paper discusses the basic pathological changes in the boundary of the cancerous tumor of the lung and the diagnostic significance of the x-ray sign of the boundary outline of the tumor. Of the 25 cases analyzed 21 specimens were obtained from surgical excision and 4 from postmortem; two of the tumors measured less than 3 cm in diameter and the remaining were all more than 3 cm.

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ORG: All of Department of Pediatrics, Hsu-chou College of Medicine Hospital, and Pathology Teaching and Research Group, Hsu-chou College of Medicine

TITLE: "Report of One Case of Infant Bilateral Necrosis of Cortex Renis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 p 418

ABSTRACT: The sick one year old boy was hospitalized for anuria, watery diarrhea, and vomiting. Various treatment measures brought no improvement. The boy died in a few days. Postmortem disclosed extensive necrosis of cortex renis in both kidneys. The case history is presented in the paper.

AUTHOR: None

ORG: Electron-microscopy Laboratory, and Teaching and Research Group of Department of Ear, Nose, and Throat, Szechwan College of Medicine

TITLE: "Carcinolysis Phenomenon of Lymph Cells in Rhinopharyngeal Cancer"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 419-421

ABSTRACT: This paper reports the use of electron-microscope to observe the relationship between cancer cells and lymph cells in biopsy tissues of rhinopharyngeal cancer. Lysogenic destruction phenomenon of cancer cells in the vicinity of lymph cells was observed. The results of the observation are reported and the significance of this phenomenon is discussed.

AUTHOR: None

ORG: Isotope Laboratory, Fukien Provincial First Hospital

TITLE: "Thyroid Scanning (Photograph) Diagnosis of Thyroid Nodules: With Results of 331 Cases of Surgical Pathology Examinations"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 422-424

ABSTRACT: Thyroid scanning is extensively used in the diagnosis of diseases of the thyroid and it is generally agreed that it is more valuable in distinguishing the characteristics of the thyroid nodules. Of the 4,496 cases for whom thyroid scanning was performed in the Fukien Provincial First Hospital since 1970, surgeries were performed for 331 cases. The surgical pathological data of these cases are used to evaluate the results of thyroid scanning. Of the group, 258 cases were benign nodules and 73 were malignant nodules. The relationship of scanning results and the pathological classification of the group is analyzed.

AUTHOR: None

ORG: None

TITLE: "Entero-Dissolving Aspirin"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 p 424

ABSTRACT: Entero-dissolving aspirin is a new aspirin tablet; each contains 0.5 g or 0.3 g of acetylsalicyclic acid. This new drug basically resolves the problem of adverse stomach reactions to aspirin to make aspirin suitable for prolonged large dosage application. This new drug is the product of Peking Pharmaceutical Plant, and has been clinically tested at the Peking Friendship Hospital. The results of observation of 12 cases, all active stage rheumatic heart disease, are briefly reported.

AUTHOR: None

ORG: Department of Mouth, Cheek, and Face Surgery, The Ninth People's Hospital, Shanghai Second College of Medicine

TITLE: "Clinical Observation of Immediate Bone Graft Following Excision of Mandible Tumor"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 pp 425-426

ABSTRACT: From October 1954 to December 1975, a total of 101 cases of bone grafts immediately following excision of mandible tumor were performed. Of the group, 87 were successful and 14 failed. Autoplastic graft proved to be better than heteroplastic graft ( $\chi^2 = 5.29$ ,  $P = 0.05$ ). Of the 94 autoplastic grafts, 83 were successful and 11 failed; of the 7 heteroplastic grafts, 4 were successful and 3 failed. A general discussion of the materials, techniques, and results, and the experience gained with respect to this group of cases is presented.

AUTHOR: None

ORG: None

TITLE: "An Antituberculous Chinese Traditional Medicinal Herb, *Lysionotus pauciflorus* Maxim."

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 p 426

ABSTRACT: Shih-tiao-lan (*Lysionotus pauciflorus* Maxim.) is a small evergreen perennial shrub, growing in damp areas in all the southern provinces. Local people use it to treat injuries and lymphatic tuberculosis. Some medical units, such as the 214 Hospital of the Chinese people's Liberation Army used it to treat pulmonary tuberculosis and obtained rather satisfactory results. Eight cases were treated with this herb alone and 4 cases were treated with this herb as well as another antituberculous drug. In one of the cases, the condition of the patient deteriorated 2 months after the start of the treatment, but was obviously improved after the dosage of the herb was doubled. The Pulmonary Department of Ning-po Municipal Fourth Hospital used the herb in a tablet form to treat 12 cases; the clinical symptoms of all were improved. The Wu-i Section Hospital of Ch'ang-ning District, Shanghai used it to treat 92 cases of lymphatic tuberculosis; the total effective rate reached 97.8%. Follow-ups in 22 months indicated stable long term effects. A flavonin was isolated from the herb. It is named Yen-tou-su.

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TITLE: "Clinical Analysis of 14 Cases of Chromaffin Cytoma"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 427-430

ABSTRACT: From May 1966 to March 1974, 14 cases of chromaffin cytoma were treated. The age of the patients varied from 10 to 54 years; the duration of the disease varied from 1 month to 13 years. Most had symptoms of palpitation, headache, and perspiration, but none had high blood pressure. In 2, massive hemoptysis accompanied the attacks. Surgery revealed the tumor to be all in the adrenal glands; 8 in the right, 4 in the left, and 1 bilateral. The size of the tumor varied from 2.2 cm in diameter and 5 g in weight to 25 cm and 504.45 g. Follow-ups of more than 10 years disclosed no recurrence. The surgical procedure is analyzed.

AUTHOR: TUNG Chih-p'eng [5576 1807 7720]

ORG: Yung-sheng-hsien People's Hospital, Yunnan Province

TITLE: "Quick Method of Computing Drug Dosage for Children"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 p 430

ABSTRACT: Since the liberation, and especially since the cultural revolution, several simplified methods for computing children's drug dosage have been proposed. Some of these require the body weight of the patient and others require computation with a pen. They are still difficult for medical workers of the basic units to master and dosage for patients under one year of age is generally too low. This paper presents 2 equations for this purpose. They are designed to make the computation easy and fast. They are as follows:  
Dosage for children under 1 year of age =  $0.01 \times (\text{age in months} + 3) \times \text{adult dosage}$   
Dosage for children over 1 year of age =  $0.05 \times (\text{age} + 2) \times \text{adult dosage}$ .  
The origin and meaning of the equations are explained.

AUTHOR: None

ORG: Ankylostomiasis Laboratory, Institute of Parasitism, Chekiang People's Public Health Experimental Center; Hsiao-shan-hsien Public Health and Epidemic Prevention Station, Chekiang Province; Kua-li People's Hospital, Hsiao-shan-hsien, Chekiang Province; Ching-chiang, Ch'eng-pei, Tang-shan Commune Hospital, Hsiao-shan-hsien, Chekiang Province

TITLE: "Observation of Effect of Small Dosage of Mieh-ch'ung-ning and Ch'u-ch'ung-ching for the Treatment of Ankylostomiasis"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 pp 431-432

ABSTRACT: From 1972 to 1973, Mieh-ch'ung-ning [Bephenini hydroxynaphthoas], Ch'u-ch'ung-ching [4-imidazolyl HCl] and thiomidine were used to treat all commune members over 10 years of age in Ching-chiang, Ch'eng-pei, Kua-li, and Tang-shan of Hsiao-shan-hsien who showed positive stool analysis of ankylostoma eggs and who were not suffering from fever or diseases of the heart, liver, lung, and kidney. The patients were divided into 7 groups; the effects of the group treated with small doses of a combination of Bephenini hydroxynaphthoas and 4-imidazolyl HCl appeared to be better than the groups treated with the 3 above drugs alone. Side effects in all 7 groups were very mild.

AUTHOR: None

ORG: Air Force Canton Hospital, Chinese People's Liberation Army

TITLE: "Clinical Observation and Experimental Research of the Treatment of Viral Hepatitis With Wu-wei-tzu"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 433-436

ABSTRACT: This paper analyzes the rate of recovery of serum glutamic propionic transaminase (SGPT) and the recurrence problem in 720 cases of viral hepatitis treated with Weu-wei-tzu [Schizandra chinensis Baill.] in various different doses and forms. The effects of the medicinal herb on the submicro-structure of liver of domestic rabbits damaged by toxic substance and effects of the medicinal herb on GPT in the test tube are also studied.

AUTHOR: None

ORG: Kuangtung Provincial Center for Prevention and Treatment of Occupational Diseases

TITLE: "Understandings in the Appearance of Brain Edema in Acute Poison by Organic Phosphorus Agricultural Drugs"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 437-438

ABSTRACT: Acute poison by organic phosphorus with concurrent brain edema has been continuously reported in China in such regions as Kuangtung, Peking, Kiangsu, Shensi, Anhwei, etc. in recent years. Two of the 13 cases had postmortem evidence which coincided with related pathological reports of the past (CHUNG-HUA PING-LI-HSUEH TSA-CHIH Vol 8 No 6, 1964.) It is generally agreed that brain edema is the important factor affecting the prognosis in such cases. For the purpose of improving future work of prevention and treatment, based upon related data reported in the country, this paper reviews the clinical manifestations, diagnoses, and measures taken to prevent and treat brain edema. Respiratory failure, oxygen deficiency, and severe damage to the central nervous system are held as the major factors leading to brain edema, and excessive administration of atropine and improper infusion procedure may also be the possible cause for the condition.

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TITLE: "Disinfecting Rural Well Water With Powdered Bleach Continuous Disinfecting Technique"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 439-441

ABSTRACT: This paper reports 2 techniques of using powdered bleach to disinfect well water. The beach is placed in a plastic bag and suspended in the water about 40 cm below the surface. In one technique a weight is tied to one end and an air bag to the other to keep it in the desired position; in the other technique a section of bamboo or an air bag is used as a float to keep the bag of bleach suspended in the well. A hole, the size of which should be in proportion to the volume of water in the well, is made at the top of the bleach bag. As the water is withdrawn from the well, the movement of the water will cause a small amount of bleach to be released from the bag to disinfect the water. This paper reports experiments conducted to study the following: (1) How to reduce the caking problem of the bleach; (2) How to inspect the quality of the bleach; (3) Relationship between the diameter of the hole and the amount of residual chlorine; (4) Relationship between the quantity of bleach, the number of days of continuous disinfection, and residual chlorine; (5) Incidence of intestinal infection before and after the adoption of the technique of disinfecting the well water.

AUTHOR: CHIN Kuan [6855 0385]

ORG: Department of Radiology, Shih-p'u People's Hospital, Hsiang-shan-hsien, Chekiang Province

TITLE: "Report of One Case of Dual Tube-like Colon Ascendens"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 p 441

ABSTRACT: A 25 year old woman was admitted in the hospital for tuberculosis of the lumbar vertebra. Upon examination, a chicken egg sized tumor was detected in the right lower abdomen. Dual colon ascendens were revealed in barium meal x-ray. Subsequent treatment, if any, is not reported.

AUTHOR: None

ORG: Shanghai Municipal "70 Sand" Mold-Making Industry Labor Public Health Survey Cooperative Group

TITLE: "Preliminary Survey of Labor Public Health in "70 Sand" Mold-Making Industry"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 442-444

ABSTRACT: The survey is to study the possibility of eliminating silicosis among the workers of the casting industry by using "70 sand" (i.e. limestone sand) to replace quartz sand in mold making and the possible effects on the health of workers in the process of using the "70 sand" molds. The "70 sand" was created by the workers and technicians of the Ch'i-shu-yen Vehicle Plant Casting Machine Shop, Ch'ang-chou, Kiangsu Province in 1970 after repeated experimentation. As a result of this survey, it is the conclusion of the authors that "70 sand" can prevent silicosis, reduce the amount of labor, and improve the productivity. There is a list of 18 health agencies which are participants of the cooperative group.

AUTHOR: None

ORG: None

TITLE: "An Antibiotic Drug - Essence of Pai-jui-ts'ao"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 p 444

ABSTRACT: This product is a HCl crystalline alkaloid extracted from a Chinese traditional broad spectrum antibiotic herb Pai-jui-ts'ao (*Thesium chinense* Turcz). Each 2 ml of the injectio contains 250 mg of the crystalline essence and is the equivalent of 10 g of the raw herb. It is used for muscular injection and clinical application has preliminarily proved its effectiveness against Gram positive or negative bacteria and *Monilia albicans*. The injectio is a product of Anhwei Feng-yang Pharmaceutical Plant. The Shanghai Chinese Traditional Pharmaceutical Second Plant is currently experimenting with a tablet form of the drug for oral administration.

AUTHOR: None

ORG: Department of Gynecology and Obstetrics, Heng-yang Second Hospital, Hunan

TITLE: "Surgical Treatment of 102 Cases of Urinary Fissura"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 pp 445-449

ABSTRACT: From 1964 to 1974, 102 cases of urinary fissura were treated. From the clinical experience, this paper discusses the pathogenesis, the types of fissures, and various surgical approaches of this disease. It is the claim of the authors that 97 of these cases were induced by unduly delayed childbirth and 5 of the cases were the result of surgical wounds. Of the group, 3 were from the towns and 99 from the rural, mostly mountainous regions. Most of the patients acquired the disease before the liberation. LIU Shao-ch'i and TENG Hsiao-p'ing's revisionist line is blamed for the lack of drugs in the rural villages for prolonged periods and there remain a large number of cases of urinary fissura victims who are not receiving treatment.

AUTHOR: CHANG Yao-hsien [1728 5069 0341]  
CHAO Te-sheng [6392 1795 0524]

ORG: Both of Lo-yang Municipal Fourth People's Hospital

TITLE: "Giant Diaphragmatic Hernia Mistakenly Diagnosed as Pneumothorax"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 p 449

ABSTRACT: The 26 year old male farmer was hospitalized for abdominal pain and vomiting. Breathing difficulty followed and the heart had obviously shifted to the right. After chest x-ray, the diagnosis was pneumothorax and exudative pleurisy. X-ray disclosed that the barium meal passed through the esophagus to the abdomen and then back into the chest cavity. It was then certain that the patient was suffering from gastric diaphragmatic hernia. Surgical repair and splenectomy brought about the cure.

AUTHOR: None

ORG: None

TITLE: "Seasonal Relationship of Contents of Flavone and Andromedotoxin-I  
in Chao-shan-pai"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 p 449

ABSTRACT: The Pharmaceutical Plant of Ch'eng-te Special School of Medicine, Hopei Province carried out a study on the relationship between changes of seasons and the contents of the effective flavone and andromedotoxin-I in Chao-shan-pai (*Rhododendron micranthum* Turcz). The medicinal herb used in the experiment was collected from the First Commune of Lung-hua-hsien, Hopei Province. The results indicate that generally in the 3 months of June, July, and August, the growth of the herb is at its height and the total flavone content is lower, 1.72-2.02% (it is 2.08-2.75% in the other 9 months;) while the andromedotoxin-I content is relatively higher, 0.06% (it is 0.02-0.03% in the other 9 months.) For this reason, attention should be given to the harvest season when a large quantity of this medicinal herb is purchased.

AUTHOR: None

ORG: Department of Ophthalmology, Hopei University of New Medicine Second Hospital

TITLE: "Observation of the Relationship Between the Phenomenon of Detachment of Retina and the Position the Rupture"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 450-453

ABSTRACT: From January 1972 to August 1973, a total of 60 cases of detached retina were treated. The pathogenesis of the group may be divided into 4 types: 24 due to severe myopia, 13 due to injury, 8 due to residual inflammation of the pigmented layer, and 15 due to unknown causes. The position of the rupture or ruptures may be divided into 3 areas: upper, lower, or bilateral. The detachment may start with a rupture on one side and develop into bilateral. If the rupture is located in the lower part an even surface of detachment is usually formed. If the rupture begins in the upper part, it often develops into complete detachment. With drawings illustrating the area of detachment with each type of rupture, this paper seeks to improve the rate of discovering the rupture and consequently the rate of surgical repair.

AUTHOR: None

ORG: Department of Gynecology and Obstetrics, First Hospital, Shanghai Municipal Bureau of Textile Industries

TITLE: "Preliminary Introduction of 70 Cases of Fungus Vaginitis Treated With K'o-mei-tso"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 p 453

ABSTRACT: K'o-mei-tso (tribenzal-imidazole, or Antifungal-No 1) is a broad spectrum antifungal drug. Since 1974, the department has used the drug in a capsule form supplied by the Shanghai Second Pharmaceutical Plant to treat 70 cases of fungus vaginitis. The capsule was used as a suppository for external application, once a day, for 10 days. A control group of 45 cases were treated with mycostatin. There was no obvious difference in the rate of effectiveness in the 2 groups.

AUTHOR: None

ORG: Pharmacology Group, Kiangsi Provincial Second People's Hospital

TITLE: "Absorption, Distribution, and Excretion of Synthetic Essence of Yu-hsing-ts'ao by Guinea-pigs"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 454-455

ABSTRACT: Based upon the folk technique of treating pulmonary abscess with the common Chinese traditional medicinal herb Yu-hsing-ts'ao (*Houttuynia cordata* Thunb.) and the result of chemical analysis of the effective element of the herb, a new drug, synthetic essence of Yu-hsing-ts'ao, has been produced. Since 1971 a series of chemical analytic studies, pharmacological experiments, and clinical application observations have been reported. The antibiotic spectrum of the new drug has been found to be extensive, including penicillin resistant *Staphylococcus aureus*. This paper reports a study on its absorption and distribution by guinea-pigs and its excretion following intravenous injection and oral administration of the drug. The activities of the drug on the blood, tissues, and organs of the test animal are discussed.

AUTHOR: None

ORG: Bone Department, Chinese People's Liberation Army General Hospital; Bone Department, Kuang-an-men Hospital, Academy of Chinese Traditional Medicine

TITLE: "Treatment of 100 Cases of Fracture of the Scaphoid Bone of the Wrist With the Card-board Paper Pressure Technique"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 pp 456-457

ABSTRACT: Fractured scaphoid bone of the wrist is not uncommon and it is often difficult to heal if it is not treated properly. Inspired by the technique of Chinese traditional physician's use of cardboard paper for stabilizing fractures of the metacarpal, the authors used one large cardboard paper, 3 small round pieces of cardboard, and 2 rolls of bandage to treat one hundred cases of fracture of the scaphoid bone since 1971 and very good results were obtained. The technique is described with illustrations.

AUTHOR: CHAO Yu-lin [6392 1635 7792]

ORG: Yen-shih-hsien People's Public Health Center, Honan Province

TITLE: "Osteopathic Manipulative Technique for the Treatment of Peripheral Adhesive Inflammation of the Shoulder Joint"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 p 457

ABSTRACT: Periarthritis and adhesion of the shoulder is a disease common among the aged. In the past few years, the author and colleagues used procaine and cortison localized enclosure technique which appeared to be effective for early stage of the disease, but the effect was not good for cases with obvious adhesion. In the past 2 years, they learned the T'ui-na technique from Chinese traditional physician [Chinese version of osteopathy or massage] and on the basis of what they learned they developed a technique of combining localized or acupuncture points enclosure with prednison and procaine with a manipulation routine to treat those cases with adhesion and stiffness of the shoulder joint. From August 1974 to March 1975, 153 such cases were thus treated and the results were very satisfactory. The procedure of this technique and important precautionary measures are described.

AUTHOR: None

ORG: Second Ward, Department of Gynecology and Obstetrics, Kuei-yang College of Medicine Hospital

TITLE: "Introducing the Technique of Using an Air Sac to Expose the Fissure During Urinary Fissura Repair"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese No 7, 15 Jul 76 p 460

ABSTRACT: Repair of bladder-vagina fissure is mostly performed through the vagina. The surgery may fail due to many factors but the important factor for success is to have a good exposure of the fissure for proper suture. This paper introduces the technique of using a regular No 14-16 rubber catheter filled with air. When it is inserted, the fissure will be fully visible. This technique was applied to 7 cases and the surgery was successful for all. The technique is demonstrated with drawings.

AUTHOR: CH'IU Wei-ch'in [6726 4850 0530]

ORG: Department of Internal Medicine, Chiang-wan Hospital, Shanghai Municipality

TITLE: "Investigation Into Serval Problems in Treating Infectious Shock"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 pp 461-464

ABSTRACT: The following problems relating to the treatment of infectious shock are discussed in the paper: (1) Sufficient quantity of fluid compensation for the volume of blood deficiency; (2) Selection of drugs for activating the blood vessels; (3) Proper quantity of adrenocortical hormone; (4) Other problems, such as application of antibiotics, diffuse intravascular coagulation (DIC) and other complications of endotoxiosis.

AUTHOR: None

ORG: None

TITLE: "Treatment of Skin Diseases With K'u -shen"

SOURCE: Peking CHUNG-HUA I-HSUEH TSA-CHIH [CHINESE MEDICAL JOURNAL] in Chinese  
No 7, 15 Jul 76 p 464

ABSTRACT: According to a report by the Department of Dermatology, Third Hospital, Peking College of Medicine, 148 cases of skin diseases have been treated with the Chinese traditional drug K'u-shen [the dried roots of *Sophora flavescens* Ait.] with a rate of effectiveness of 79%. The drug is administered in a muscular injection of 2-4 ml (each ml of injectio is the equivalent of 1 g of the raw drug,) of the injection preparation of the drug, once a day. The drug in tablets for oral administration is also acceptable. Other drugs such as vitamin B<sub>12</sub>, calcium, etc. are used at the same time. The treatment caused a rise of white cell count in 4 cases, and a reduction of white cell count in 2 cases. There was no change in the liver function. In a few cases there were such side-effects as dizziness, nettle rash, fainting, and numbness in the fingers. The skin diseases included eczema, extensive neurodermitis, and eczema seborrhoicum. Of these, the effect of the treatment on neurodermitis appeared to be the most obvious.

6168

CSO: 4009

SCIENCE BULLETIN

AUTHOR: None

ORG: Comprehensive Scientific Investigation Team of Mount Everest,  
Chinese Academy of Sciences

TITLE: "Geological History of Mount Everest and Its Impact on Nature  
and Human Activities"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21  
No 7, 15 Jul 76 pp 304-310

ABSTRACT: This article reports the results of a comprehensive scientific investigation over the Mount Everest area by a group of 9 Chinese climbers, organized by the Chinese Academy of Sciences, who reached also the 8,848 meter peak on 27 May 1976. The results obtained include: 1) clarification of the geotectonic characteristics of the northern and southern zones, and the zone in between, and a derivation of their geological history; 2) ascertaining of the precipitation, climate, atmosphere, solar radiation, glaciers, snow covering, etc. of the area; 3) climatic characteristics and their application to weather forecast; and 4) impact of the altitudes on human physiological functions.

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ORG: None

TITLE: "Laser Isotope Separation"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21  
No 7, 15 Jul 76 pp 311-319

ABSTRACT: The authors review recent advances in the techniques of laser isotope separation that includes: 1) photoexcited chemical reactions; 2) molecular decomposition under strong infra-red resonance field; 3) laser photo-pressure; 4) selective two-step photo-ionization; 5) selective two-step photolysis; 6) selective one-step prephotolysis; 7) selective monomolecular isomerism; and 8) excited Ramann scattering. A discussion is finally made on the significance of laser isotope separation technique, despite its still being in the experimental exploration stage.

AUTHOR: None

ORG: Joint Investigation Group of Kirin Meteorite Shower, Chinese Academy of Sciences

TITLE: "Rare Meteorite Shower in World History"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21 No 7, 15 Jul 76 pp 327-329

ABSTRACT: This article describes the unusual Kirin meteorite shower occurred on 8 March 1976, which covered an elliptic strip of about 500 square kilometers in two hsiens and one municipality of the Kirin district, and lasted for four to five minutes. The largest of the more than 100 meteorites collected so far weighs 1,770 kilograms. The shapes, textures, contents and distribution, systematically studied by the Chinese Academy of Sciences, are described, with five photographs reproduced.

AUTHOR: HSIA Tao-hsing [1115 6670 5887]

ORG: Institute of Mathematics, Fu-tan University

TITLE: "On Field Strength and Gauge Potential of Yang-Mills Fields"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21 No 7, 15 Jul 76 pp 330-333

ABSTRACT: In a discussion on the dependence of gauge potential on field strength, the author shows that linear algebraic equations can also be used to solve these conditions besides partial differential equations, that the structures corresponding to the gauge potential of similar field strength can be derived under most ununique conditions, and that some specific solutions to sourceless equations can also be derived.

The author thanks Prof. C. N. Yang for providing a prepublished manuscript relative to this study.

AUTHOR: CHANG Cheng-pin [1728 2973 2430]

ORG: Department of Oceanographic Chemistry, Shantung Oceanographic College

TITLE: "A  $\phi(z/l, x)$  Rule of Inorganic Ion Exchange Reactions in Seawater and Its Applications -- II. Application of  $\phi(z/l, x)$  Rule in the Systems of Solution of KCl-Various Inorganic Ion Exchangers"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21 No 7, 15 Jul 76 pp 334-336

ABSTRACT: The author reports a study on the application of the  $\phi(z/l, x)$  rule of inorganic ion exchange reactions in seawater to the system of solutions of KCl-Various inorganic ion exchangers. The study proves quantitatively that anion exchange takes place when  $Z/r$  is high, and cation exchange takes place when  $Z/r$  is low. It was found also that a correction factor must be applied to such amphoteric ion exchange as Al, Be, Si, Mn, Sn, Ce, etc., and that the rule can also be applied to general solutions.

This paper was received for publication on 4 March 1975.

SCIENCE BULLETIN

AUTHOR: None

ORG: Acupuncture Anaesthesia Section, Second Laboratory, Shanghai  
Institute of Physiology

TITLE: "Knowing the Mechanism of Acupuncture Anaesthesia from Practice"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21  
No 8, 15 Aug 76 pp 342-347

ABSTRACT: This article reviews a systematic study on the mechanism of acupuncture anaesthesia based on experiments on patients, animals, as well as doctors themselves at various selected acupuncture points concerned, using 2% procaine as the local pain sealing agent. It is confirmed that acupuncture stimulates the central nervous system through all kinds of nervous tissues, and ascends within the extra-thalamus system to counter pain. On this basis, by directing acupuncture to selected points at the nervous trunk, or at the middle of the back relative to the desired location of anaesthesia, more effective anaesthetic results have been realized.

AUTHOR: YANG Chi-k'o [2799 4764 3784]

ORG: University of Science and Technology of China

TITLE: "Some Understanding Gained in Studying Genetics and the Breeding Theory"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21  
No 8, 15 Aug 76 pp 348-356

ABSTRACT: Following an introduction to the development of genetics from Mendel to the discovery and synthesis of DNA, the author discusses the basic principles and characteristics of inbreeding and hybridization in genetics, and how they can be coordinated into a system for breeding of better varieties of crops as well as livestock. The method of selecting and comparing good varieties, and the importance of environmental influences are also discussed.

AUTHORS: HAN Wei-p'ing [7281 4850 1456]  
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ORG: Both of Northeastern Institute of Petroleum Chemistry

TITLE: "Current Tendencies of the Electronic Theory of Organic Chemistry"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21  
No 8, 15 Aug 76 pp 357-367

ABSTRACT: The authors review recent advances in the electronic theory in organic chemistry, which include the development of the conception of electronegativity, and the new interpretations of dynamic electron affinity, group equilibrium polar strength and dynamic electron affinity, and the principle of electronegative equilibrium and group electro-negativity, which all tend to cooperate atomic orbit characteristics into electronegativity research. The authors finally point out the many problems that still remain to be probed.

AUTHOR: SUN Ti [1327 3695]

ORG: Institute of History of Natural Sciences

TITLE: "Struggle Against Environmentalism by the Ancient Chinese People"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21  
No 8, 15 Aug 76 pp 368-373

ABSTRACT: The author reviews the history of ancient Chinese people's struggle against Confucius' environmentalism, which include the construction of various water conservation and irrigation projects against droughts and floods, seawalls against seawater invasion, plot fields against erosion, ditches against saline-alkaline water-logged fields, cannons against frost and hails, as well as treatises against environmentalism. The tremendous progress in agriculture since the liberation is a clear proof of Chairman Mao's leadership against environmentalism.

AUTHORS: YANG Ming-chu [7122 0682 3796]  
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ORG: YANG of Institute of High Energy Physics (CAS), and CHU and WEI  
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TITLE: "Spectral Properties of Transport Operator for Medium with  
Central Spherical Cavity"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21  
No 8, 15 Aug 76 pp 374-378

ABSTRACT: The authors study the existence of the dominant eigenvalues  
of two transport operators from a physical system of non-uniform  
mediums in six theorems, and derive also the mutual relationship  
between the two dominant eigenvalues.

This paper was received for publication on 24 October 1975.

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TITLE: "A New Theory of Gravitation -- Gravitational Theory with  
Local de Sitter Invariance"

SOURCE: Peking K'O-FSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21  
No 8, 15 Aug 76 pp 379-382

ABSTRACT: The authors propose a new gravitational theory with local  
de Sitter invariance, based on two previous studies on a gravitational  
theory with local Lorentz invariance, and a geometrical interpretation  
of local de Sitter invariance. Since the equations derived here belong  
to the Maxwell equations type, the equation group may reveal the  
antithetic unity between attraction and repulsion in the gravitational  
field, as well as help solving some problems in the general theory of  
relativity.

This paper was received for publication on 15 February 1976.

AUTHOR: None

ORG: This Journal

TITLE: "Conference for Exchanging Experience on the Scientific Survey of the Tsinghai-Tibet Plateau"

SOURCE: Peking K'O-HSUEH T'UNG-PAO [SCIENCE BULLETIN] in Chinese Vol 21 No 8, 15 Aug 76 pp 383-384

ABSTRACT: This article reports the Conference on the Scientific Survey of the Tsinghai-Tibet Plateau convened on 17-27 April 1976 at Chengtu, and attended by more than 300 representatives from various units concerned. More than 50 thesis were received, read and discussed at the conference, dealing mainly with the swelling up and the geological history of the plateau, the characteristics of its natural conditions and resources, and the reasons for the existing high yielding wheat crops in the area. The 1976 program for the plateau's scientific survey was also decided.

11,206

CSO: 4009 "

SCIENTIA SILVAE SINICA

AUTHOR: None

ORG: Institute of Forestry, Shensi Provincial Academy of Agriculture and Forestry

TITLE: "Reversed Slope Terraced Fields"

SOURCE: Peking CHUNG-KUO LIN-YEH K'O-HSUEH [SCIENTIA SILVAE SINICA] in Chinese No 2, Oct 76 pp 22-27

ABSTRACT: In the loessic plateau of the Northwest, the annual rainfall is only 200-600 mm, but during the 3 months of July, August, and September, the storm may be such that 3 mm of rain per minute is rather common. For this reason, less than 1,000 mu of seedlings survived among the more than 5,000 mu planted in Chang-chia-shan of P'u-ch'eng-hsien, in 1960-1965. In the 4 years of 1972-1975, the technique of reversed slope terraced fields was adopted and more than 14 thousand mu of seedlings were planted. The survival rate was above 90%. This technique involves constructing terraced fields on the mountain slopes, with the surface of the fields in a reversed 10-20° slope so that a top soil layer 30-50 cm in depth is preserved. This technique was created by Ting-hsi District Ts'ai-k'ou Forestry Experimental Farm of Kansu Province in about 1958 and is being extended throughout the loessic plateau in recent years. This technique is explained with photos and diagrams.

AUTHOR: None

ORG: Kuangtung Provincial Institute of Forestry

TITLE: "Preliminary Report on Sexual Hybridization Research of Bamboo"

SOURCE: Peking CHUNG-KUO LIN-YEH K'O-HSUEH [SCIENTIA SILVAE SINICA] in Chinese No 2, Oct 76 pp 47-52

ABSTRACT: The research on sexual hybridization of bamboo began at the institute in 1972. In the past 4 years, 13 hybridization groupings have been experimented and a number of hybrid bamboo produced. Compared with the parent pairs, the majority of the hybrids seem to grow obviously faster. For example, hybrid No 34 grows to 9 m in height and 6.3 cm in girth in just 3 years, while its mother variety, planted at the same time, grows to 2.7 m and 1.5 cm only. Due to the fact that asexual propagation of bamboo is easy, the selection process of the hybrids may start in the F<sub>1</sub> generation. The results of 4 years of work have proved that heterosis utilization of bamboo is very promising as a pathway for increasing the yield of bamboo. The technique and the growth and morphological conditions of the hybrids are reported in detail.

AUTHOR: None

ORG: National Matsucoccus matsumurae Cooperative Group

TITLE: "Research on Matsucoccus Matsumurae Kuwana"

SOURCE: Peking CHUNG-KUO LIN-YEH K'O-HSUEH [SCIENTIA SILVAE SINICA] in Chinese  
No 2, Oct 76 pp 53-60

ABSTRACT: The pine pest Matsucoccus matsumurae Kuwana was discovered by the Japanese scientist on the black pines of a Tokyo garden in Japan in 1903. It is highly selective with respect to hosts. It damages different species in different parts of China. The damaged stands grow weak so that secondary diseases and pests will also easily occur. This paper reports the morphological characteristics of this pine pest, the principle of its occurrence, its life habits, and its prevention and control techniques.

AUTHOR: None

ORG: Lumber Drying Experiment Laboratory, Nanking Industrial College of Forest Products

TITLE: "Experimental Research on the Technique of Constant Pressure Steam Drying of Lumber"

SOURCE: Peking CHUNG-KUO LIN-YEH K'O-HSUEH [SCIENTIA SILVAE SINICA] in Chinese  
No 2, Oct 76 pp 61-64

ABSTRACT: Lumber processing plants generally use air as the heat transfer medium to dry the lumber in a kiln. The drying cycle is too long. Experiments have succeeded to shorten the cycle 20-50%, but it is rather difficult to accelerate the process still further. A new technique is therefore created to saturate the lumber with steam first until the temperature of the center reaches 100°. The steam is then discontinued and heat at a temperature much higher than 100° is used to cause the lumber to evaporate very fast. With this technique, in the experiment carried out in the laboratory in 1974, the entire drying process did not exceed 6 hours. The technique is explained. Discussions of problems awaiting further research are included.

AUTHOR: None

ORG: Szechwan Provincial Institute of Forestry; Kiangsi Provincial Institute of Lumber Industry; Shanghai Municipal Sheng-li Lumber Plant

TITLE: "Experiment on Phenol Aldehyde Emulsion Resin Glue"

SOURCE: Peking CHUNG-KUO LIN-YEH K'O-HSUEH [SCIENTIA SILVAE SINICA] in Chinese No 2, Oct 76 pp 65-68

ABSTRACT: Phenol aldehyde glue is an important material for making plywood. There are mainly 2 kinds: the alcohol dissolving type and the alkaline dissolving type. The former is costly and highly inflammable; therefore, the plywood industry generally uses the latter type. The shortcomings of this type of glue include slow solidification, requiring prolonged heat pressure, and the need of using bean powder as a filler. For the purpose of improving the process and reducing the consumption of beans, the Szechwan Institute of Forestry, the Kiangsi Institute of Lumber, and the Shanghai Sheng-li Lumber Plant carried out a joint research project to produce the emulsion phenol aldehyde resin glue. The basic theory of the emulsion, the preliminary small scale experiment, and the experiment on its industrial manufacturing process are reported.

6168

CSO: 4009

END